

10 CFR Part 830 Training

The Office of Nuclear and Facility Policy, in cooperation with NNSA, has prepared and has been offering a three day course on 10 CFR 830 Subpart B, Safety Basis Requirements of the Nuclear Safety Management rule. The course covers the background of development of the rule, the Implementation Guides for Documented Safety Analysis (DSAs), Technical Safety Requirements (TSRs), and the Unreviewed Safety Question (USQ) requirements. It also covers the ten rule safe harbors for DSAs and “special considerations,” such as alternate methodologies, and the exemption process. A typical course agenda is as follows:

I. Introduction to Objectives and Outline for Course

1. **10 CFR 830 Overview** Discussion of Subpart B (expectations, requirements, suspense dates, safe harbors, etc.) Interface between STDs 3009, 1027, 3011, the CFR and Implementation Guides. Compliance with safe harbors as relates to rule compliance.
2. **Authorization Basis/Safety Basis Overview**
Concept of Authorization Basis and how it relates to Safety Basis. Components of Safety Basis. Related regulations and Orders. Definitions. Safety basis in design of new nuclear facilities.
3. **DSA Implementation Guide**
Overview of scope of the Guide; different from other guides because it primarily points to the DSA safe harbors. What the Guide supports in terms of being rule compliant, and why. Coverage of the PDSA approach presented in the Guide; correlation with the design process; provisions for approval of limited procurement and/or construction prior to PDSA approval. PDSA approval basis.

DSA Safe Harbors

4. **STD-3009 as a generic safe harbor** STD-3009 as a safe harbor for all nonreactor nuclear facilities. (**safe harbor #2**). Discussion of application of 3009 for Hazard Category 3 nonreactor nuclear facilities (**safe harbor #8**). Using STD-3009 for hazard analysis.
5. **STD-3009 (Continued)** Using STD-3009 for accident analysis.
Using STD-3009 for derivation and classification of controls, definition of terms, graded approach expectations, examples.
6. **Criticality safety integration into DSAs and TSRs**
Summary of DSA and TSR guidance and expectations relative to criticality hazards; what this means in terms of issues described by the CSSG in its White Paper; relationship to STD-3009 guidance. How to link CSEs into hazard analyses and identification of controls. Reference to similar issues relative to FHAs.
7. **STD-3011** Safe harbor for facilities with limited operational life, deactivation, and for transition surveillance and maintenance. Status of existing DOE-approved SARs/BIOs and rule compliance. Guidance for application of STD-3011 specifically directed at limited life, deactivation, and transition surveillance and maintenance. (**safe harbors 3 & 4**).

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DSA Safe Harbors (continued)

8. **STD-1120 and 29 CFR safe harbor provisions for decommissioning.** STD-1120 and 29 CFR safe harbor provisions for certain environmental restoration activities (**safe harbors 5 & 6,**).
9. **Transportation** (O 460.1A and G 460.1-1) (**safe harbors #9**). Order and Guide status as safe harbor for DSA. DOT compliance vs. requirements for TSD, TSR, USQ. Categorization issues. Derivation of controls and transportation TSRs.
10. **Special considerations**
Other DSA development methods, other nuclear safety design criteria and Transportation Packaging for onsite transfers, NSTP 2002-1.
11. **TSR Requirements, Development, Implementation and Violations** How hazard controls are derived from hazard analysis and accident analysis. Interface between DSA derivation of hazard controls and TSR bases. How bases are developed. Treatment of SC and SS SSCs in TSRs. Role of LCOs and SRs. Relationships between Administrative Controls, safety management programs, and procedures. Importance of walking through TSRs for reality check that they actually can be complied with. TSR implementation after approval of the DSA/TSR. What qualifies as a TSR violation.
12. **USQ Implementation Guide Overview**
USQ and PISAs, discernible increase in risk elements as USQ criteria, application to criticality and transportation hazards.